

Wells differs from this authority by predicting that before long the recognized method of treating the pedicle in such cases will be the intraperitoneal one. Chapter III. is devoted to the subject of Extirpation of the Spleen, and contains the record of three fatal cases that have been operated upon by the author. No new light is thrown upon the subject.

Chapter IV. deals with renal operations. Details of cases of Nephrotomy and Nephrectomy of the writer's are given. In the latter operation Mr. Thornton's plan of fixing the end of the ureter outside the abdominal incision is approved of. The remaining three short chapters are devoted to the surgery of the liver (No. V.), to cases of mesenteric, omental and pancreatic cysts, and undescended testicle (No. VI.); lastly, some of the various operations on the stomach and intestines are briefly sketched (No. VII.)

It is somewhat strange to note, throughout the book, the preference shown for quoting continental authorities on statistical and other questions; yet there are many well-known English speaking surgeons who have done much work and given proof of great originality in this branch of surgery, and whose published statistics of operations compare very favorably with those of Sir Spencer Wells. Their names, in the present volume, will be looked for in vain.

There can be no doubt that this book will prove useful to many, especially to those who have yet to learn the *modus operandi* of abdominal surgery; and also that it will be valuable as containing the opinions of a most eminent and successful surgeon and the record of his life's work.

THOMAS F. CHAMASSE.

A TREATISE ON AMPUTATIONS OF THE EXTREMITIES AND THEIR COMPLICATIONS. By B. A. WATSON, A.M., M.D. Illustrated. Philadelphia: P. Blakiston, Son & Co. 1885. 8vo., pp. 762.

At first glance it is difficult to determine the exact status of this work, and the judgment pronounced by the reader will depend mainly upon his personal acquirements and circumstances. If he possess an extensive library, is well read in ancient and modern surgical literature, and has had considerable experience in surgical work, he will perhaps give an adverse verdict. From this point of view, he will criticise the author's method of giving long quotations from the most prominent and distinguished authorities on the subjects under consideration, instead of merely referring to them, and trusting either to the reader's present knowledge or to his future diligence in consulting the original writings. He will prefer that the volume should have been abbreviated at the expense of full quotations, and that the relation of the personal

experience of one operator should have occupied a larger space. It is evident, however, that the work has not been written for such favored members of the profession. The general trend and object of this volume is well stated by the author in the preface, wherein he says that "he was prompted to undertake the preparation of this encyclopædic monograph, containing the important facts, theories and arguments relating to amputations of the extremities and their complications, in order that he might thus facilitate the study of these subjects by placing before medical students and practitioners, in a single volume, much practical knowledge which is not otherwise accessible to them." Looking at the work from this point of view, which would seem to be the proper one, it undoubtedly contains much to recommend it to those desirous of obtaining information on this branch of surgery. Nevertheless, there is such a diffuseness even about its quotations, such an uncertainty about some of its teachings, and such a lack of direct, positive and detailed directions in those portions that should be the most practical, that its value, even to the student and to the less favored practitioner, is seriously diminished.

The first chapter gives a historical review of the various methods of amputation practiced by the earlier and later surgeons, tracing their evolution from the guillotine and cautery down to the modern amputating knife and catgut ligature. The author is evidently an enthusiastic Listerean, and dedicates his work to the father of antiseptic surgery.

The second chapter relates to conditions affecting the result of amputations, and is a valuable digest of the principles which should guide the surgeon in estimating the probabilities of safe and rapid recovery from an operation wound. Age, sex, habits and functional derangements receive appropriate consideration. The fact that organic disease of the liver and kidneys may exist to such a degree as to seriously militate against recovery, without being sufficient to give rise to obvious symptoms, is strongly emphasized. The practical deduction is insisted on, that a thorough examination of the patient, and especially of the urine, should be made prior to any operative procedure. Hygienic conditions, intemperance, constitutional vices, and hospitalism are also treated of.

Chapter III. embraces nearly thirty pages devoted to a careful, full and judicious discussion of conditions which may cause an amputation to be demanded, to be advantageous, or to be contra-indicated. Wise and conservative advice is given in regard to operations of complaisance, the causes and conditions rendering such operations

justifiable being fairly stated. The time and point at which an amputation should be done is also considered.

Chapter IV., covering some sixty pages, is devoted to some of the preliminary questions to be decided, and the preparations to be made, prior to operation. In comparing the relative advantages and disadvantages of amputations in continuity, and disarticulations, the author contents himself with rehearsing the arguments *pro* and *con*, without ranging himself on either side, but states that a choice must be made with reference to the special and peculiar features of each case. Dr. Watson gives a general description of the methods of forming flaps, preferring the cutaneous to the musculo-cutaneous flap as being less liable to be followed by sloughing and sepsis, but his preference is not very strong, as he lays more stress on the care exercised during and after operation, than on the special method adopted. Regarding anæsthetics, the author is firmly convinced of the almost absolute safety of ether, when properly administered, and the unavoidable danger of chloroform. He reprobates the use of a mixture of alcohol, chloroform and ether, having seen some very unpleasant results therefrom. The sections devoted to the consideration of arrest of hemorrhage, drainage, closure of the wound, and the application of the Protecting Dressings, are all too brief, and lacking in detail. The little that is said on the subject of drainage is neutralized by the introduction of a singular cut, from a French source evidently, which shows very well how a drainage tube ought not to be used.

A hundred pages are devoted to the description of special amputations and disarticulations of the extremities. This section is plentifully illustrated and quite complete, giving directions for performing amputations, and their various modifications, in the language of the original authors. A preliminary study of the treatment of wounds considers the subject of disease germs, their origin, nature, and relation to wounds, with comments on the various methods of after treatment. Dr. Watson's conclusions are summarized as follows:

"1. That there are certain germs in the air, more particularly in the atmosphere of over-crowded hospitals, which, if permitted to enter wounds, give rise directly to living organisms, inflammation, and supuration; and indirectly to all septic conditions which are found as wound complications.

2. "That the successful management of wounds depends principally on the ability of the surgeon to keep the wounds, under all circumstances and at all times, free from germs and living organisms; and, therefore, the value of any method of wound-treatment depends primarily on the degree of antiseptis which can be obtained by it."

The next chapter deals with the application and management of the various forms and varieties of dressings and after-treatment. Lister's antiseptic dressing receives an unqualified endorsement, as would naturally be expected, in view of the author's strong predilection for that method, founded on his personal experience and study. Guerin's cotton wadding, O'Halloran's open method, Callender's and Markoe's modified antiseptic, Gamgee's dry and infrequent dressings, Hewson's earth treatment, and water dressings, receive appropriate consideration and illustration. One searches in vain for any mention of corrosive sublimate or of iodoform, or of any dressing material other than carbolic gauze and cotton-wool, except the earth used by Hewson. This chapter shows no evidence of any knowledge by the author of the advance in wound treatment which the last five years have witnessed. All his references are to publications and experiences that have already been forgotten in the throng of newer and more exact knowledge that has since accumulated. This chapter bears internal evidence of having been written some years ago, and of having been incorporated in the book without revision.

In chapter VIII., after briefly describing the varieties of, and the changes in stumps, the author enters upon the subject of artificial limbs, "which," he says, "has not in England or America received that attention to which it is entitled from the medical profession. The works on surgery in the English language are singularly deficient in this respect, containing only a few meagre facts, wholly insufficient to prepare the surgeon to make an intelligent selection of an artificial limb for a patient, or even to study the advantages and disadvantages of a particular kind of stump, with reference to prosthesis." This very valuable part is, in the main, adapted from French sources.

The last three chapters of the book treat of the various complications of wounds. Shock, hemorrhage and traumatic fever, pyæmia and septicæmia, and septic wound accidents are freely and fully written about. The author's original investigations into the etiology of non-septic traumatic fever can hardly be said to have settled this moot point, although making an important contribution, by exclusion, to our stock of knowledge on the subject. The remarks upon gangrene are thorough and well considered. The article on osteomyelitis is illustrated by an excellent colored plate. The proof-reader is responsible for many typographical errors disseminated throughout the volume. As a whole, this "encyclopedic monograph" is worthy of praise as a useful and adequate compendium of facts and theories relating to amputations.

G. R. BUTLER.